

CLAIMS

1. A method of processing an information sequence with a decoder, comprising:

5 selecting a window within the information sequence;
 calculating a training period for the window; and
 initializing at least one recursion of the window based on the
calculated training period.

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2. The method of claim 1 wherein the recursion is a forward recursion.

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3. The method of claim 1 wherein the recursion is a backward recursion.

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4. The method of claim 1 further comprising:
dividing the information sequence into at least two windows.

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5. The method of claim 1, further comprising:
calculating the training period based on a size of the window.

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6. The method of claim 1, further comprising:
calculating the training period based on a signal quality of the
window.

7. The method of claim 6 wherein the training period is
non-decreasing as the signal quality increases.

8. The method of claim 1 wherein the decoder is iterative.
- 5 9. The method of claim 8, further comprising:
calculating the training period based on an iteration number.
- 10 10. The method of claim 9 wherein the training period is
non-decreasing as the iteration number increases.
11. The method of claim 1 further comprising:
selecting an additional window; and
computing an additional training period for the additional window
15 based on the training period of the window.
12. Computer program product in a computer usable medium for
processing an information sequence with a decoder, comprising:
20 computer program code that selects a window within the
information sequence;
computer program code that calculates a training period for the
window; and
computer program code that initializes at least one recursion of
25 the window based on the calculated training period.
13. The program of claim 12, further comprising:
computer program code that divides the information sequence
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14. The program of claim 12, further comprising:
computer program code that calculates the training period based
on a size of the window.

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15. The program of claim 12, further comprising:
computer program code that calculates the training period based
on a signal quality of the window.

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16. The program of claim 12, wherein the decoder is iterative,
further comprising:
computer program code that calculates the training period based
on an iteration number.

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17. The program of claim 12, further comprising:
computer program code that calculates the training period using
a size of the window, a signal quality of the window and an iteration number of
the window.

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18. A turbo decoding system comprising:
means for selecting a window within an information sequence;
means for calculating a training period for the window; and
means for initializing at least one recursion of the window based
on the calculated training period.

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19. The system of claim 18, further comprising:
means for dividing the information sequence into at least two
windows.

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20. The system of claim 18, further comprising:
means for calculating the training period based on a size of the
window.

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21. The system of claim 18, further comprising:
means for calculating the training period based on a signal
quality of the window.

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22. The system of claim 18, wherein the decoder is iterative, further
comprising:
means for calculating the training period based on an iteration
number.

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23. The system of claim 18, further comprising:
means for calculating the training period using a size of the
window, a signal quality of the window and an iteration number of the window.

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24. The system of claim 18, further comprising:
at least one interleaver.

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25. The system of claim 18, further comprising:
at least one de-interleaver.

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